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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/627,262	07/28/2000	Andrew Warner	977.035US1	2344

21186 7590 03/07/2002

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER
STAMPF, TIMOTHY R

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 03/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/627,262	WARNER, ANDREW	
	Examiner	Art Unit	
	Timothy R. Stampf	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 July 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 July 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. Figures 4-7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to because of the following informalities:

(a) The reference to -- PSTN Access 46 -- on line 7 of page 7, should be changed to -- PSTN Access 44 --.

(b) The reference to -- test bed 10 -- on lines 8 and 1 of pages 7 and 8 respectively, should be changed to -- test bed 11 --.

(c) The missing information indicated on line 23 of page 8 should be provided.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckes et al. (U.S. Patent No. 6,243,832) in view of Armistead et al. (U.S. Patent No. 6,260,071).

With regard to claim 1, Eckes et al. discloses a test bed having a bank of modems (Fig. 2, and col. 6, lines 20-24), wherein the test bed includes a means for spoofing operation of a plurality of modems (col. 3, lines 32-52); connecting the test bed modem bank to the bank of modems to be tested (Fig. 2, col. 3, lines 32-38, and col. 6, lines 25-31); and executing software in the test bed for the modem bank to establish a plurality of simultaneous connections between the test bed modem bank and the bank of modems to be tested (col. 3, lines 39-52, and col. 7, line 40-64).

Eckes et al. does not disclose a test bed having a Remote Access Server (RAS) concentrator. However, Eckes et al. discloses a test bed having a modem bank, as discussed previously. Further, Armistead et al. teaches the use of remote access concentrators (i.e., RAS concentrators) in large network access servers that provide dial-up services (col. 1, lines 13-19 and 32-37). It would have been obvious to one of ordinary skill to modify the test bed of Eckes et al. to use a RAS concentrator, as opposed to a modem bank, because Eckes et al. teaches that a RAS is a combination of a modem bank and a high-end router (col. 1, lines 42-44), and Armistead et al. teaches the use of RAS concentrators in large systems, and large dial-up servers are representative of the type of systems to be tested by the instant application.

With regard to claim 2, Eckes et al. discloses certain features of the claimed invention as discussed previously. Eckes et al. does not disclose connecting the RAS concentrator to the bank of modems across a Public Switched Telephone Network (PSTN) wherein executing includes establishing each connection across the PSTN. However, Eckes et al. discloses connecting a test bed bank of modems to the bank of

modems across a telephone switch (Fig. 2, item 220, col. 1, lines 36-38, and col. 6, lines 45-54). Further, Armistead et al. teaches a typical example of a network access server (i.e., RAS concentrator) providing dial-up services transmitting and receiving data through the PSTN (col. 1, lines 13-19 and 34-36). It would have been obvious to one of ordinary skill to modify Eckes et al. to connect a test bed bank of modems (i.e., RAS concentrator, as discussed previously) to the bank of modems under test across a PSTN, because Eckes et al. already discloses a telephone system (i.e., switch) and Armistead et al. discloses a typical implementation of a RAS concentrator connected to a PSTN.

With regard to claim 3, Eckes et al. in combination with Armistead et al. discloses connecting a test bed bank of modems (i.e., RAS concentrator, as discussed previously) to the bank of modems under test across a PSTN, wherein the RAS concentrator connects to the telephone switch (i.e., PSTN, as discussed previously) via an ISDN Primary Rate Interface (PRI) (col. 1, lines 38-41).

With regard to claim 4, Eckes et al. discloses providing a test bed having a bank of modems (Fig. 2, and col. 6, lines 20-24), wherein the test bed includes a means for spoofing operation of a plurality of modems (col. 3, lines 32-52); connecting the test bed modem bank to the bank of modems to be tested (Fig. 2, col. 3, lines 32-38, and col. 6, lines 25-31); and executing software in the test bed for the modem bank to establish a plurality of simultaneous connections between the test bed modem bank and the bank of modems to be tested (col. 3, lines 39-52, and col. 7, line 40-64), as discussed previously.

Eckes et al. does not disclose a test bed having a RAS concentrator for connecting to a communications server having a RAS concentrator to be tested (i.e., "second" RAS concentrator). However, Eckes et al. discloses a test bed having a modem bank for connecting to a network access server (i.e., remote access server) containing a bank of modems, as discussed previously. Further, Armistead et al. teaches the use of remote access concentrators (i.e., RAS concentrators) in large network access servers that provide dial-up services (col. 1, lines 13-19 and 32-37), and each RAS concentrator having its own transmission facilities connecting it to the communications medium, in this case, a PSTN (col. 1, line 32-37). It would have been obvious to one of ordinary skill to modify the test bed of Eckes et al. to use a RAS concentrator, as opposed to a modem bank in the test bed, as discussed previously, for testing a RAS concentrator in a communications server, as opposed to testing a bank of modems in a communications server, because Armistead et al. teaches that RAS concentrators typically have their own transmission facilities for connecting to a communications medium (i.e., a RAS concentrator performs the same function as a bank of modems, among other things).

With regard to claim 5, Eckes et al. discloses certain features of the claimed invention as discussed previously. Eckes et al. does not disclose connecting the RAS concentrators across a Public Switched Telephone Network (PSTN) wherein executing includes establishing each connection across the PSTN. However, Eckes et al. discloses connecting across a telephone switch (Fig. 2, item 220, col. 1, lines 36-38, and col. 6, lines 45-54) as discussed previously. Further, Armistead et al. teaches a

typical example of a network access server (i.e., RAS concentrator) providing dial-up services transmitting and receiving data through the PSTN (col. 1, lines 13-19 and 34-36). It would have been obvious to one of ordinary skill to modify Eckes et al. to connect across a PSTN, because Eckes et al. already discloses a telephone system (i.e., switch) and Armistead et al. discloses a typical implementation of a RAS concentrator connected to a PSTN.

With regard to claim 6, Eckes et al. in combination with Armistead et al. discloses connecting a test bed bank of modems (i.e., RAS concentrator, as discussed previously) to the bank of modems under test (i.e., RAS concentrator under test, as discussed previously) across a PSTN, wherein the RAS concentrators connect to the telephone switch (i.e., PSTN, as discussed previously) via ISDN Primary Rate Interfaces (PRI) (col. 1, lines 38-41).

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau et al. (U.S. Patent No. 6,147,987) in view of Armistead et al. and further in view of Eckes et al.

With regard to claim 7, Chau et al. discloses a network access server (i.e., RAS) comprising a processor and a telephone network interface connected to the processor, wherein the processor operates under program control to provide spoofing support (Fig. 1, col. 6, lines 36-47, Fig. 4, col. 8, lines 16-27). Chau et al. does not disclose a RAS concentrator, a PSTN, or support for spoofing individual modem connections.

Armistead et al. teaches the use of RAS concentrators with PSTN interfaces in large network access server systems that provide dial-up services (col. 1, lines 13-19

and 32-37) across a PSTN. It would have been obvious to modify Chau et al. to use a RAS concentrator with a PSTN interface instead of a network access server (i.e., RAS), because Armistead teaches the use of RAS concentrators with PSTN interfaces for the same purpose as a network access server (i.e., RAS), only on systems of a larger scale, and systems that use a PSTN.

Eckes et al. discloses a test bed having a bank of modems (Fig. 2, and col. 6, lines 20-24), wherein the test bed includes a means for spoofing operation of a plurality of modems (col. 3, lines 32-52); and executing software in the test bed for the modem bank to establish a plurality of simultaneous connections between the test bed modem bank and the bank of modems to be tested (col. 3, lines 39-52, and col. 7, line 40-64), as stated previously. Armistead et al. teaches that RAS concentrators typically have their own transmission facilities for connecting to a communications medium, in this case, a PSTN (col. 1, lines 32-37). It would have been obvious to one of ordinary skill to modify Chau et al. in combination with Armistead et al. to include support for spoofing individual modem connections across the PSTN interface of the RAS concentrator, because Eckes et al. teaches spoofing support for a test bed bank of modems, and Armistead et al. teaches that RAS concentrators typically have their own transmission facilities for connecting to a communications medium (i.e., a RAS concentrator performs the same function as a bank of modems, among other things).

With regard to claim 8, Chau et al. in combination with Armistead et al. and Eckes et al. discloses a RAS concentrator including a processor and a PSTN interface connected to the processor, wherein the processor operates under program control to

spoof individual modem connections across the PSTN interface, as discussed previously for claim 7. Chau et al. in combination with Armistead et al. and Eckes et al. does not disclose a RAS concentrator adapter including a computer interface capable of communicating with a computer. However, Eckes et al. discloses a modem bank capable of communicating with a computer (col. 6, lines 20-24) for the purpose of spoofing individual modem connections across a communications medium. It would have been obvious to one of ordinary skill to modify Chau et al. in combination with Armistead et al. and Eckes et al., as discussed previously for claim 7, to provide a RAS concentrator adapter with an interface capable of communicating with a computer, because the modem bank disclosed by Eckes et al. communicates with a computer and performs the same function as the RAS concentrator adapter of the instant application.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chau et al. in view of Armistead et al. and Eckes et al. and further in view of Eng et al. (U.S. Patent No. 6,195,359).

Chau et al. in combination with Armistead et al. and Eckes et al. discloses all of that previously discussed for claim 8. Chau et al. in combination with Armistead et al. and Eckes et al. does not disclose a RAS concentrator adapter that plugs into a computer motherboard. Eng et al. discloses a RAS adapter that plugs into a computer motherboard (Fig. 1, col. 3, lines 59, and Fig. 3, col. 4, line 55 to col. 5, line 3). It would have been obvious to one of ordinary skill to modify Chau et al. in combination with Armistead et al. and Eckes et al. to include a RAS concentrator adapter that plugs into a

computer motherboard, because Eng et al. teaches that a RAS can be implemented on an adapter card.

7. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckes et al. in view of Armistead et al. and further in view of Chau et al.

Eckes et al. discloses a test bed having a bank of modems (Fig. 2, and col. 6, lines 20-24) connected to a processor (Fig. 2, and col. 6, lines 14-24) and a communications medium Fig. 2, and col. 6, lines 25-31). Eckes et al. also discloses program control for the test bed to establish a plurality of simultaneous modem connections and for spoofing individual modem connections (col. 3, lines 32-52 and col. 7, line 40-64). Eckes et al. does not disclose a RAS concentrator connected to a PSTN with a signal processor for managing multiple, and spoofing individual, modem connections across the PSTN.

Armistead et al. teaches the use of RAS concentrators with PSTN interfaces in large network access server systems that provide dial-up services (col. 1, lines 13-19 and 32-37) across a PSTN. It would have been obvious to modify Eckes et al. to use a RAS concentrator with a PSTN interface instead of a bank of modems, because Armistead teaches the use of RAS concentrators with PSTN interfaces for the same purpose as a bank of modems, only on systems of a larger scale, and systems that use a PSTN.

Chau et al. discloses a network access server (i.e., RAS) comprising a processor and a telephone network interface connected to the processor, wherein the processor operates under program control to provide spoofing support (Fig. 1, col. 6, lines 36-47,

Fig. 4, col. 8, lines 16-27). It would have been obvious to one of ordinary skill to modify Eckes et al. in combination with Armistead et al, as discussed above, to include within the RAS concentrator a processor and program control to provide spoofing support for individual modem connections, because Chau et al. discloses spoofing support within a RAS (i.e., RAS concentrator), and Eckes et al. provides spoofing for a modem bank to test a communications server (i.e., a RAS concentrator performs the same function as a bank of modems, among other things).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Stampf whose telephone number is 703-305-3339. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-308-7725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

trs
February 27, 2002

MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800